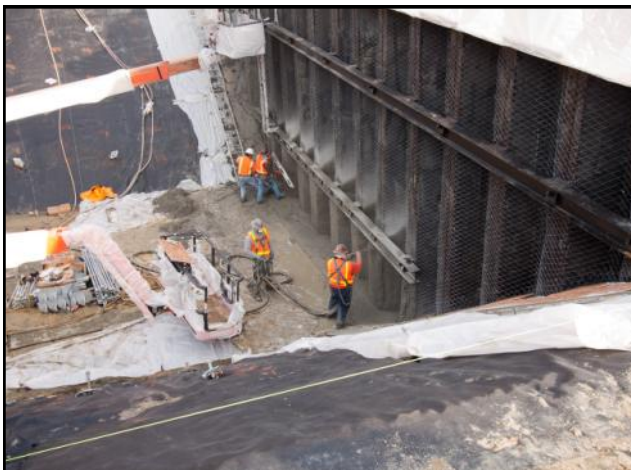


ORION

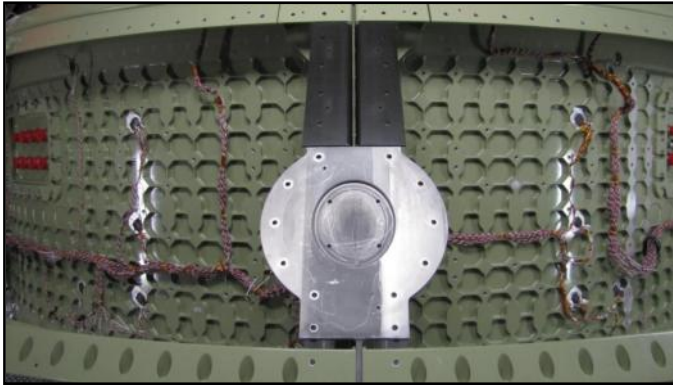
CREW EXPLORATION VEHICLE
WEEKLY ACCOMPLISHMENTS



12.03.10



The Hydro Impact Basin “shotcreting” process where concrete is conveyed through a hose and projected at high velocity onto the surface began at the Langley Research Center in Hampton, Virginia. The multi-day process also involves pouring of concrete into the basin, one of the final steps towards completion of the facility at the end of December. The Hydro Impact Basin will be used for future Orion water landing tests.



Installation of the integration fixture (shown right) into the Mechanical Vibration Facility took place at the Vibroacoustic Facility at NASA Glenn Research Center's Space Power Facility, in Sandusky, Ohio. Once installed, the integration fixture will mate with the servo-hydraulic vertical and horizontal-axis actuators in exactly the same manner as the vibration table. This will allow initial checkouts and tuning of the vibration system actuators and control system in advance of obtaining the vibration table.



Drilling for the Thermal Protection System Backshell installation to the Crew Module Ground Test Article attachment structure began at the Michoud Assembly Facility in New Orleans, Louisiana. In addition, several internal mass simulators were installed. Next, the team will continue to match-drill holes for the Thermal Protection System Backshell panels and install wiring harnesses.



The CEV Parachute Assembly System team completed a wind tunnel test of the Parachute Compartment Drop Test Vehicle at Texas A&M's Oran Nicks Low Speed Wind Tunnel in College Station, Texas. The 14% scale model (shown left) included a representative parachute compartment populated with main parachute deployment bags and drogue mortars. The test results will be used in parachute trajectory simulations and will be compared with standard aero Computational Fluid Dynamics solutions.

